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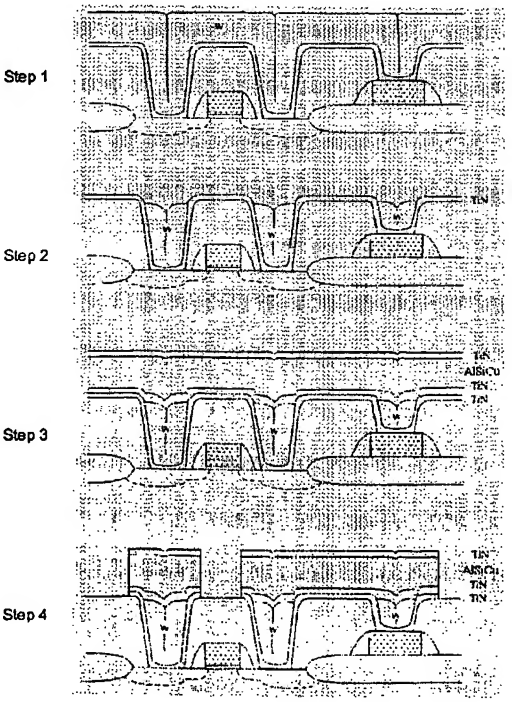
(54) Fabrication of advanced silicon-based MEMS devices

(57) A micro-electro-mechanical (MEM) device and an electronic device are fabricated on a common substrate by fabricating the electronic device comprising a plurality of electronic components on the common substrate, depositing a thermally stable interconnect layer on the electronic device, encapsulating the interconnected electronic device with a protective layer, forming a sacrificial layer over the protective layer, opening holes in the sacrificial layer and the protective layer to allow the connection of the MEM device to the electronic device, fabricating the MEM device by depositing and patterning at least one layer of amorphous silicon, and removing at least a portion of the sacrificial layer. In this way, the MEM device can be fabricated after the electronic device on the same substrate.

Figure 14
Interconnection strategy allowing the fabrication of advanced MEMS after the integrated circuit



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EUROPEAN SEARCH REPORT

Application Number
EP 04 10 0440

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TECHNICAL FIELDS SEARCHED (Int.Cl.7)

B81B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Berlin	10 August 2005	Meister, M

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